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[54] PRODUCTION OF IFN USING DA15 PEPTIDE

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Related U.S. Application Data

[63] Continuation of Ser. No. 590,565, Sep. 28, 1990, abandoned, which is a continuation-in-part of Ser. No. 486,473, Feb. 28, 1990, abandoned.

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[58] Field of Search 435/69.51, 70.1, 172.3; 536/23.1

[56] References Cited

PUBLICATIONS

"Differentiation Antigens in the Hematopoietic System" by Immunotech.
G. Antonelli et al. "Generation of a Soluble IFN-Gamma Inducer by Oxidation of Galactose Residues on Macrophages" *Cell. Immun.* 94: 440-446 (1985).
N. Feltham et al., 9 J. Interf. Res. 493-507 (1989).

J. Carlin et al., 9 J. IFN Res. 167 et seq. (1989) (IDO activity).

J. Carlin et al., 139 J. Immunol. 2414-2418 (1987) (IDO induction).

J. Carlin et al., 9 J. IFN Res. 329 et seq. (1989) (IDO activity).

R. Devos et al., 10 Nuc. Acids Res. 2487-2501 (1982) (human interferon-gamma sequence information).

J. Vilcek, The Importance Of Having Gamma, in *Interferon* 1982, vol. 4, pp. 129-154 Academic Press (1982) (interferon-gamma).

Y. Ozaki et al. 144 Biochem. Biophys. Res. Commun. 1147-1153 (1987) (IDO tests).

M. Julius et al., 3 Eur. J. Immunol. 645-649 (1973) (nylon separation).

M. Edelstein et al., 143 J. Immunol. 2969-2973 (1989) (IDO induction by interferon-gamma).

B. Korant et al., 259 J. Bio. Chem. 14835-14839 (1984).

D. Blomstrom et al., 261 J. Bio. Chem. 8811-8816 (1986).

N. Reich et al., 84 P.N.A.S. USA 6394-6398 (1987).

A. Haas et al., 262 J. Biol. Chem. 11315-11323 (1987).

E. Knight et al., 263 J. Bio. Chem. 4520-4522 (1988).

E. Knight, Jr. et al., 8 J. Interf. Res. Supp. 1, S4 (1988).

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[57] ABSTRACT

An in vitro method for the production of interferon is set forth. The method involves the culture of monocytes with a new DA15 peptide produced in Daudi cell lines in response to stimulation with interferon gamma.

1 Claim, 12 Drawing Sheets

